

Where can uranium be found?

Uranium is in the food we eat, and the water we drink. Certain areas of the country, and certain areas of South Carolina, have higher concentrations of uranium due to the local rock types. If groundwater is in contact with rocks or soil containing uranium, some of the uranium can be dissolved into the water.

Drinking water standards

Uranium in drinking water is regulated under the Safe Drinking Water Act. This law sets Maximum Contaminant Levels (MCLs) for public drinking water systems for certain harmful materials that may be found in the water, including uranium. The MCL for uranium is 30 µg/l (micrograms per liter). Check your yearly Consumer Confidence Report (CCR), sent to you by your public water system, for information on the quality of your drinking water.

For More Information

S.C. DHEC Uranium Web site:

<http://www.scdhec.gov/environment/water/uranium.htm>

S.C. DHEC Radium Web site:

<http://www.dhec.sc.gov/environment/water/radium.htm>

EPA Radionuclides Web site:

<http://water.epa.gov/lawsregs/rulesregs/sdwa/radionuclides/index.cfm>

S.C. DHEC Radon Web site:

www.scdhec.gov/radon



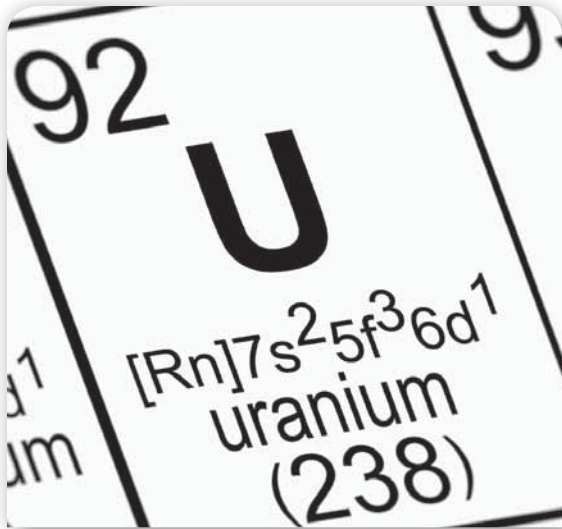
www.scdhec.gov

*We promote and protect the health
of the public and the environment.*

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facts about Uranium

Uranium is a weakly radioactive element found at low levels in most rocks, soil, and water. Radioactive elements break down over time into different elements, giving off energy (radiation) as they do so. Uranium produces radium and radon as it breaks down over a very long period of time.



Health effects of ingesting uranium

We are all exposed to certain amounts of radiation, called background radiation, every day. Most uranium leaves the body within a few days. Exposure to high or repeat amounts of uranium over a long period of time can cause kidney damage. Long-term exposure to high levels of uranium may also increase your risk of developing bone and liver cancer and blood diseases like leukemia. Infants and young children, or individuals with weakened immune systems, are at higher risk for adverse health effects from greater exposure. Talk to your doctor about any concerns you may have about your exposure to uranium.

How do I know if my water contains excessive uranium?

All public water systems with fifteen or more service connections and twenty-five or more year-round residents are tested for certain radionuclides (radiation emitting substances), including uranium. If uranium is found above the MCL, the system must notify the customers and use an approved treatment method, or find another source of water. If you have your own drinking water well, you may choose to have your water tested for uranium. Call DHEC's Office of Lab Certification (803) 896-0970, or e-mail them at labcerthelp@dhec.sc.gov, for a current list of certified labs.

What can I do if my water contains excessive uranium?

Public drinking water systems are regulated, and must work with DHEC to resolve the problem. If you own your own drinking water well, "point of use" ion exchange and reverse osmosis (RO) are two treatment methods that can effectively remove uranium from your drinking water. Both methods require occasional maintenance to remain effective. Refer

to the manufacturer specifications and read the instructions before purchase and use. You may want to test your water after treatment to be sure the unit is working properly. The National Sanitation Foundation International certifies certain water treatment units. Call their Consumer Hotline at 1-800-673-8010, or see their Web site at www.nsf.org. Using bottled water for drinking and cooking is another option. Uranium is not absorbed through the skin; therefore bathing and showering are not a health risk.

Radium and radon

If your water contains uranium, there is the potential that it may also contain radium and/or radon. The MCL for radium is 5 pCi/L (picocuries per liter) and the treatment options are the same as for uranium. EPA has not set a limit for radon in drinking water. Radon in the air in your home is considered a larger health concern. You can obtain a free radon test kit by calling DHEC's Radon Hotline at 1-800-768-0362. They can also advise you about what to do if you have high levels of radon in your home.